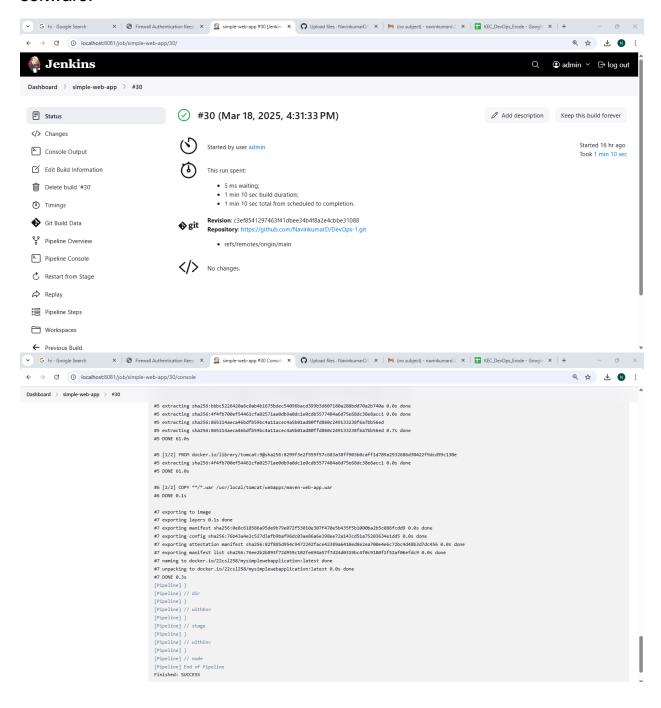**Jenkins**

Jenkins is a widely used open-source automation server that plays a crucial role in DevOps by facilitating Continuous Integration (CI) and Continuous Delivery (CD) pipelines, automating tasks like building, testing, and deploying software.

Docker commands

docker ps

docker run -itd -P <img_id>

docker images

docker ls

docker cp <s.f> <c.i>:<path>

docker exec -it containerid bin/bash

Docker compose commands

sudo apt install fontconfig openjdk-17-jre

java -version

sudo service Jenkins restart

sudo service Jenkins status

sudo apt install docker.io -y

sudo service docker restart

sudo service docker status

sudo usermod -aG docker $USER

docker images

docker ps

sudo chmod 666 /var/run/docker.sock

curl -LO https://dl.k8s.io/release/v1.32.0/bin/linux/amd64/kubectl

sudo install -o root -g root -m 0755 kubectl /usr/local/bin/kubectl

chmod +x kubectl

mkdir -p ~/.local/bin

mv ./kubectl ~/.local/bin/kubectl

kubectl version --client

curl -LO https://github.com/kubernetes/minikube/releases/latest/download/minikube-linux-amd64

sudo install minikube-linux-amd64 /usr/local/bin/minikube && rm minikube-linux-amd64

minikube start

minikube status

kubectl get pod

kubeclt get deploy

kubectl get replica

kubectl get pod -o widedocker exec -it david-db-1 /bin/bash

mysql -u root -p

sudo apt install docker-compose -y

sudo curl -L "https://github.com/docker/compose/releases/latest/download/docker-compose-$(uname -s)-$(uname -m)" -o /usr/local/bin/docker-compose


```
navin@ITP-CC16-42:~$ sudo apt update
[sudo] password for navin:
Ign:1 https://pkg.jenkins.io/debian binary/ InRelease
Hit:2 https://pkg.jenkins.io/debian binary/ Release
Get:4 http://security.ubuntu.com/ubuntu noble-security InRelease [126 kB]
Hit:5 http://archive.ubuntu.com/ubuntu noble InRelease
Get:6 http://archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]
Get:7 http://security.ubuntu.com/ubuntu noble-security/main amd64 Packages [671 kB]
Get:8 http://security.ubuntu.com/ubuntu noble-security/main Translation-en [130 kB]
Get:9 http://security.ubuntu.com/ubuntu noble-security/main amd64 Components [8968 B]
Get:10 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Packages [820 kB]
Get:11 http://archive.ubuntu.com/ubuntu noble-backports InRelease [126 kB]
Get:12 http://security.ubuntu.com/ubuntu noble-security/universe Translation-en [177 kB]
Get:13 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Components [52.0 kB]
Get:14 http://security.ubuntu.com/ubuntu noble-security/restricted amd64 Components [208 B]
Get:15 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 Components [208 B]
Ign:16 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 Packages
Ign:17 http://archive.ubuntu.com/ubuntu noble-updates/main Translation-en
Get:18 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 Components [151 kB]
Get:19 http://archive.ubuntu.com/ubuntu noble-updates/universe amd64 Packages [1040 kB]
Get:20 http://archive.ubuntu.com/ubuntu noble-updates/universe amd64 Components [364 kB]
Get:21 http://archive.ubuntu.com/ubuntu noble-updates/restricted amd64 Components [212 B]
Get:22 http://archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 Components [940 B]
Get:16 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 Packages [922 kB]
Get:23 http://archive.ubuntu.com/ubuntu noble-backports/main amd64 Components [208 B]
Get:24 http://archive.ubuntu.com/ubuntu noble-backports/universe amd64 Components [20.0 kB]
Get:25 http://archive.ubuntu.com/ubuntu noble-backports/restricted amd64 Components [216 B]
Get:26 http://archive.ubuntu.com/ubuntu noble-backports/multiverse amd64 Components [212 B]
Get:17 http://archive.ubuntu.com/ubuntu noble-updates/main Translation-en [209 kB]
Fetched 4946 kB in 6s (878 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
57 packages can be upgraded. Run 'apt list --upgradable' to see them.
navin@ITP-CC16-42:~$ java --version
openjdk 17.0.14 2025-01-21
OpenJDK Runtime Environment (build 17.0.14+7-Ubuntu-124.04)
OpenJDK 64-Bit Server VM (build 17.0.14+7-Ubuntu-124.04, mixed mode, sharing)
navin@ITP-CC16-42:~$ git version
git version 2.43.0
navin@ITP-CC16-42:~$ mvn -versiojn
Apache Maven 3.8.7
Maven home: /usr/share/maven
Java version: 17.0.14, vendor: Ubuntu, runtime: /usr/lib/jvm/java-17-openjdk-amd64
Default locale: en, platform encoding: UTF-8
OS name: "linux", version: "5.15.167.4-microsoft-standard-wsl2", arch: "amd64", family: "unix"
navin@ITP-CC16-42:~$ kubectl version --client
Client Version: v1.32.3
Kustomize Version: v5.5.0
navin@ITP-CC16-42:~$ minikube start --driver=docker
    minikube v1.35.0 on Ubuntu 24.04 (amd64)
```



```
Error from server (NotFound): pods "pod" not found
navin@ITP-CC16-42:~$ kubeclt get deploy
ctl get replica
kubectl get pod -o wideCommand 'kubeclt' not found, did you mean:
  command 'kubectl' from snap kubectl (1.32.3)
See 'snap info <snapname>' for additional versions.
navin@ITP-CC16-42:~$ kubectl get replica
error: the server doesn't have a resource type "replica"
navin@ITP-CC16-42:~$ kubectl get pod -o wide
No resources found in default namespace.
navin@ITP-CC16-42:~$ sudo apt install docker-compose -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  python3-compose python3-docker python3-dockerpty python3-docopt python3-dotenv python3-packaging python3-texttable python3-websocket
The following NEW packages will be installed:
  docker-compose python3-compose python3-docker python3-dockerpty python3-docopt python3-dotenv python3-packaging python3-texttable python3-websocket
0 upgraded, 9 newly installed, 0 to remove and 57 not upgraded.
Need to get 338 kB of archives.
After this operation, 1779 kB of additional disk space will be used.
Get:1 http://archive.ubuntu.com/ubuntu noble/universe amd64 python3-websocket all 1.7.0-1 [38.1 kB]
Get:2 http://archive.ubuntu.com/ubuntu noble/main amd64 python3-packaging all 24.0-1 [41.1 kB]
Get:3 http://archive.ubuntu.com/ubuntu noble-updates/universe amd64 python3-docker all 5.0.3-1ubuntu1.1 [89.1 kB]
Get:4 http://archive.ubuntu.com/ubuntu noble/universe amd64 python3-dockerpty all 0.4.1-5 [11.4 kB]
Get:5 http://archive.ubuntu.com/ubuntu noble/universe amd64 python3-docopt all 0.6.2-6 [26.1 kB]
Get:6 http://archive.ubuntu.com/ubuntu noble/universe amd64 python3-dotenv all 1.0.1-1 [22.3 kB]
Get:7 http://archive.ubuntu.com/ubuntu noble/universe amd64 python3-texttable all 1.6.7-1 [11.0 kB]
Get:8 http://archive.ubuntu.com/ubuntu noble/universe amd64 python3-compose all 1.29.2-6ubuntu1 [84.6 kB]
Get:9 http://archive.ubuntu.com/ubuntu noble/universe amd64 docker-compose all 1.29.2-6ubuntu1 [14.0 kB]
Fetched 338 kB in 2s (184 kB/s)
Selecting previously unselected package python3-websocket.
(Reading database ... 43009 files and directories currently installed.)
Preparing to unpack .../0-python3-websocket_1.7.0-1_all.deb ...
Unpacking python3-websocket (1.7.0-1) ...
Selecting previously unselected package python3-packaging.
Preparing to unpack .../1-python3-packaging_24.0-1_all.deb ...
Unpacking python3-packaging (24.0-1) ...
Selecting previously unselected package python3-docker.
Preparing to unpack .../2-python3-docker_5.0.3-1ubuntu1.1_all.deb ...
Unpacking python3-docker (5.0.3-1ubuntu1.1) ...
Selecting previously unselected package python3-dockerpty.
Preparing to unpack .../3-python3-dockerpty_0.4.1-5_all.deb ...
Unpacking python3-dockerpty (0.4.1-5) ...
Selecting previously unselected package python3-docopt.
Preparing to unpack .../4-python3-docopt_0.6.2-6_all.deb ...
Unpacking python3-docopt (0.6.2-6) ...
Selecting previously unselected package python3-dotenv.
Preparing to unpack .../5-python3-dotenv_1.0.1-1_all.deb ...
Unpacking python3-dotenv (1.0.1-1) ...
Selecting previously unselected package python3-texttable.
Preparing to unpack .../6-python3-texttable_1.6.7-1_all.deb ...
Unpacking python3-texttable (1.6.7-1) ...
Selecting previously unselected package python3-compose.
Preparing to unpack .../7-python3-compose_1.29.2-6ubuntu1_all.deb ...
Unpacking python3-compose (1.29.2-6ubuntu1) ...
Selecting previously unselected package docker-compose.
Preparing to unpack .../8-docker-compose_1.29.2-6ubuntu1_all.deb ...
Unpacking docker-compose (1.29.2-6ubuntu1) ...
Setting up python3-dotenv (1.0.1-1) ...
Setting up python3-texttable (1.6.7-1) ...
Setting up python3-docopt (0.6.2-6) ...
Setting up python3-packaging (24.0-1) ...
```